Weekly Updates On nu e Meeting

Fitting 3Gaussian Flux (POT Normalization)

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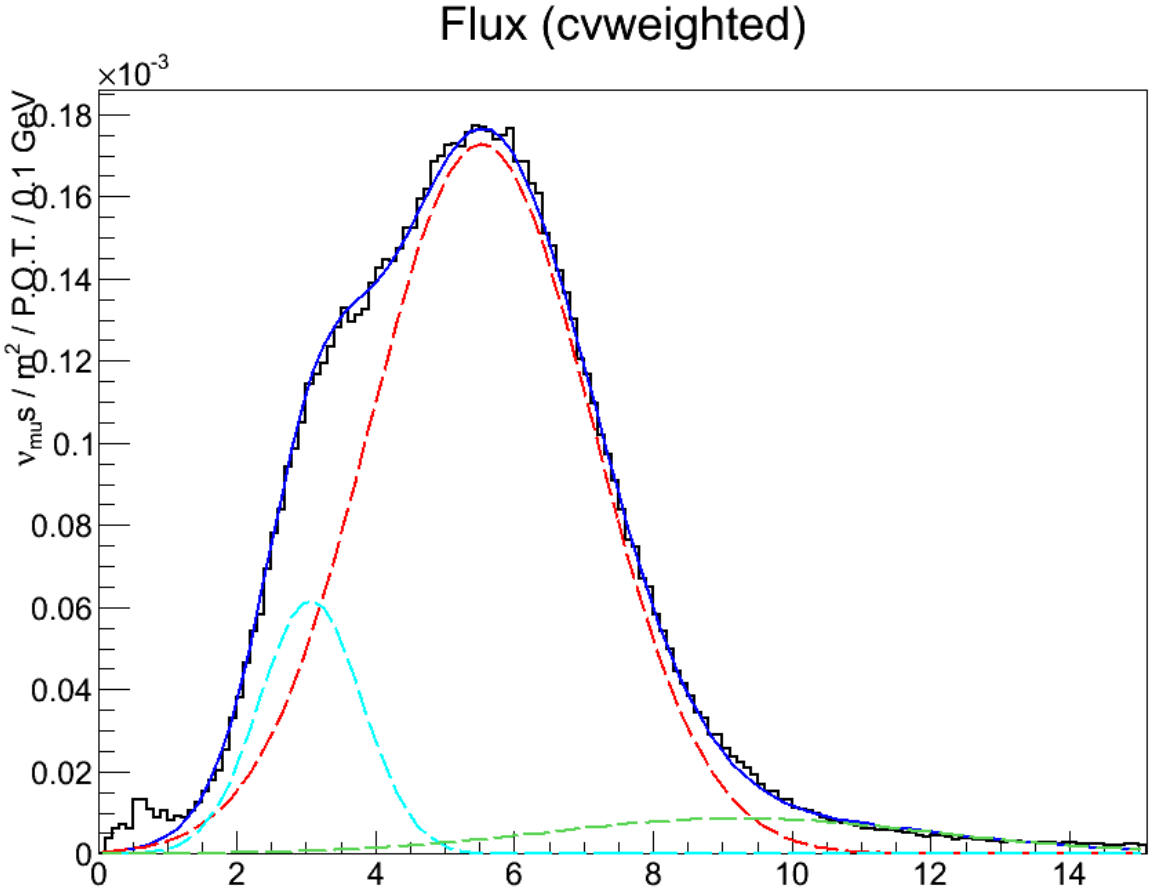
Parameterize New Flux Histogram

3 Gaussian, 9 parameters

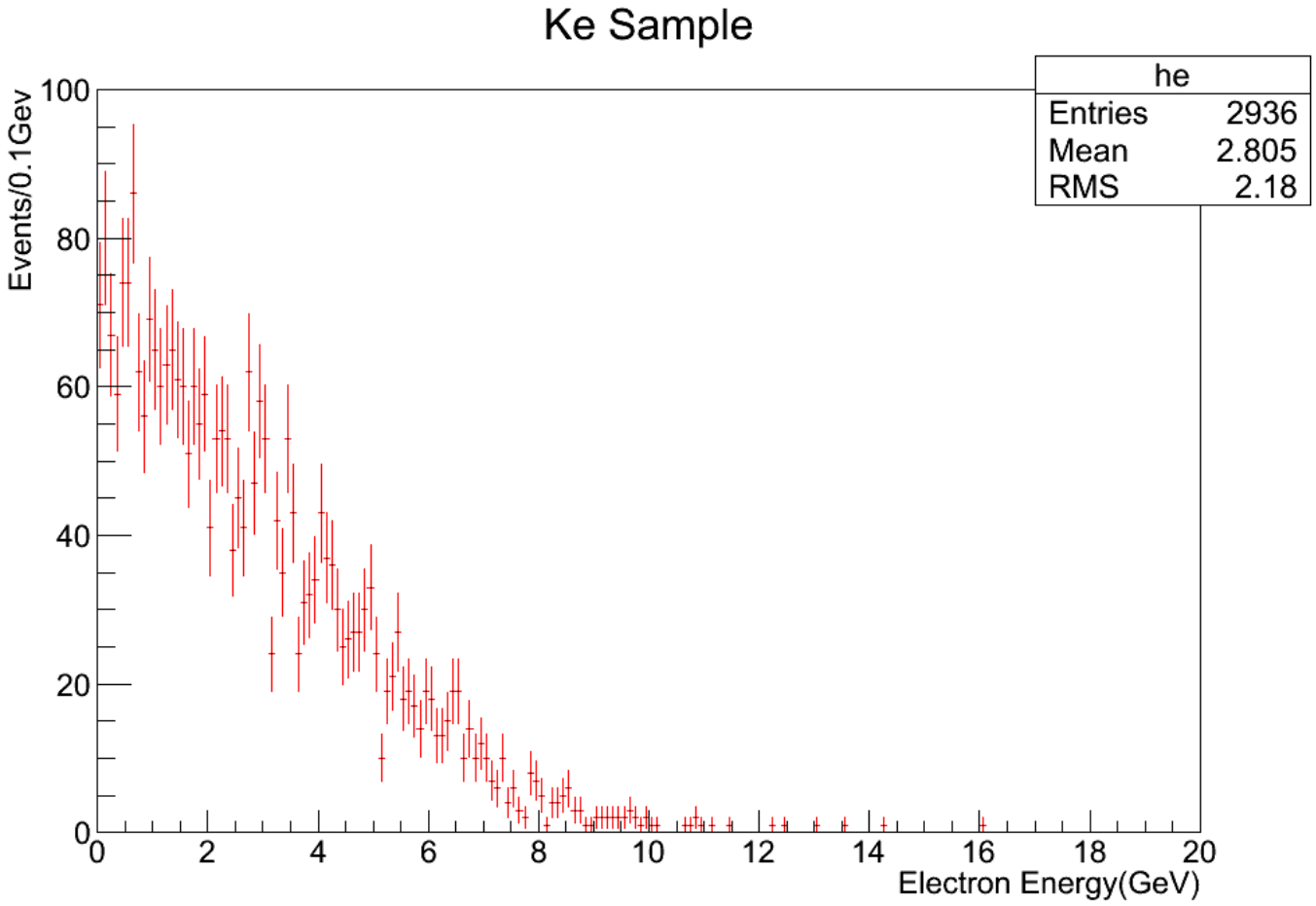


par	value
a1	1.728e-04
m1	5.518
s1	1.601
a2	6.177e-05
m2	3.061
s2	0.738
a3	8.656e-06
m3	9.232
s3	2.814

Electron Spectrum Sample

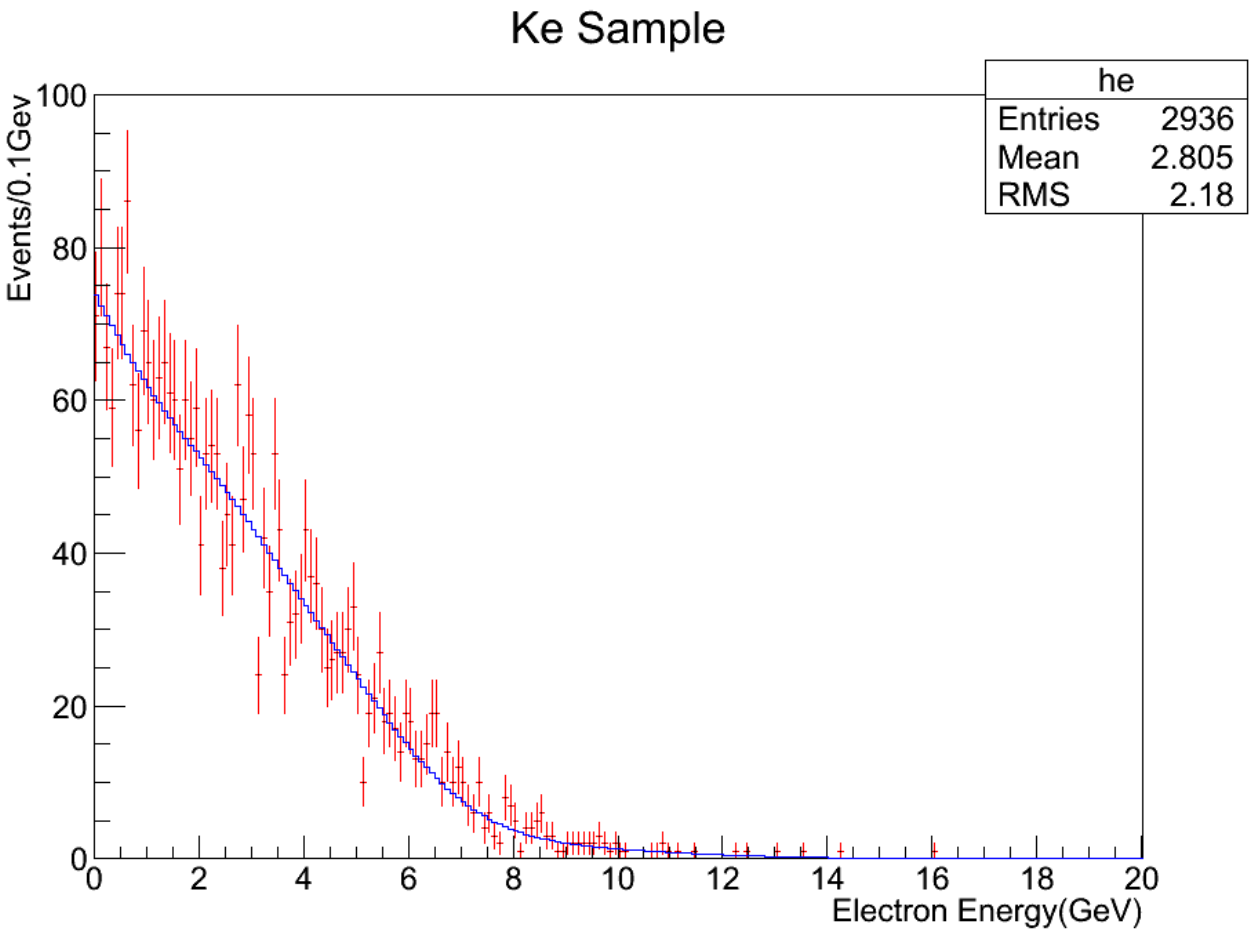
for 20e20 POT Normalization

Input the functional flux to the model, get a electron kinetic energy histogram. Randomly sample Ke with a Gaussian error.



Tminuit Fitting Parameters

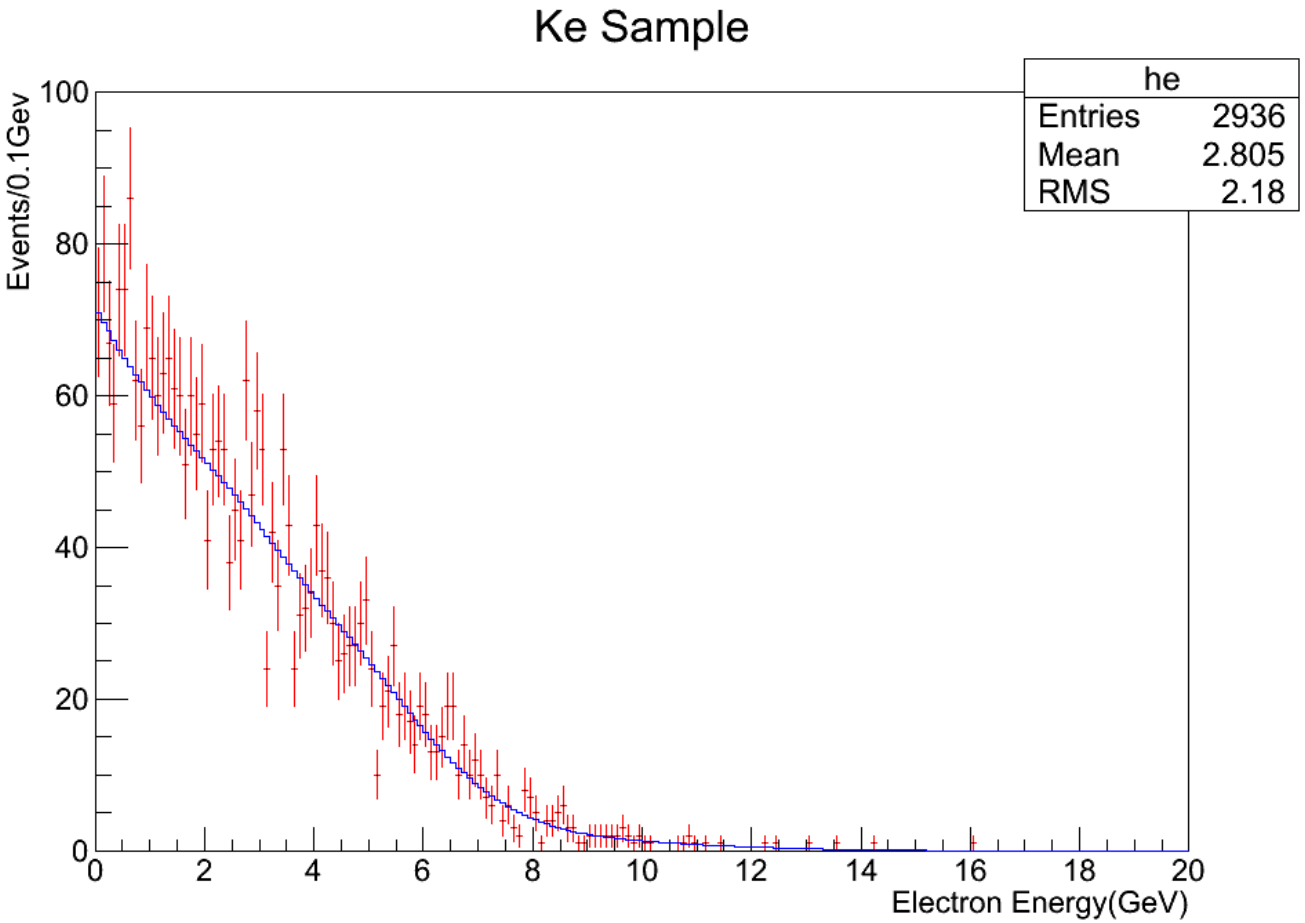
Fitting m1 (the mean value of first gaussian, true is 5.518)



Tminuit Fit m1 Parameter: 5.285

Tminuit Error: 1.164

Fitting a1 (true is 1.728e-04)



Tminuit Fit a1 Parameter: 1.647e-04

Error: 5.428e-05

Fitting 9 Parameters and Errors

	a1	m1	s1	a2	m2	s2	a3	m3	s3
True	5.518	1.728e-04	1.601	6.177e-05	3.061	0.738	8.656e-06	9.232	2.814
Fitted	5.285	1.647e-04	1.522	5.640e-05	2.392	0.642	6.352e-06	8.525	2.236
Error	1.164	5.428e-05	0.496	1.814e-04	6.584	1.886	8.253e-06	9.310	1.414